

REMARKS

This is a response to the Office Action of March 29, 2004.

Claims 1, 3-11, 14-17 and 20-25 are amended to improve clarity. Claim 1 now refers to the use of header data for consistency with claims 16 and 24. Claims 2, 12, 13, 18, 19 and 26 are cancelled. Claims 27-32 are new.

The amendments to independent claims 1, 16 and 24 are based on the specification, e.g., page 35, lines 7-25. Claims 27, 31 and 32 are based on the specification, e.g., page 14, lines 11-28 and page 21, line 26 to page 22, line 5. Claim 28 is based on the specification, e.g., page 34, lines 17-20. Claims 29 and 30 are based on the specification, e.g., page 18, lines 2-4.

Claims 27, 31 and 32 state that the unique hardware address identifiers comprise media access control (MAC) identifiers, which are identifiers at level 2 in the OSI protocol stack. Claim 28 states that the at least one protocol application module generates the data streams that emulate the client requests from a plurality of applications running at the client workstations. Claims 29 and 30 state that the at least one protocol stack component encapsulates the data streams thereof according to different protocol stacks by providing different ones of the data streams with header data according to different ones of the different protocol stacks.

Regarding paragraph 4 of the Office Action, Applicants are filing formal drawings herewith.

Applicants note the double patenting rejections in paragraphs 5-7 of the Office Action in view of co-pending application no. 09/516,708. Applicants submit that the present application and application no. 09/516,708 are clearly directed to different inventions. For example, claim 1 of the present invention refers to a simulator of workstations that includes a protocol application module, protocol stack component, and data delivery module. None of these components is recited in the claims of application no. 09/516,708. Moreover, Applicants note that the specifications of the two applications include different subject matter.

Claims 1-26 have been rejected under 35 U.S.C. §102(e) as being anticipated by U.S. patent 6,549,882 to Chen et al., U.S. patent 6,167,534 to Straathof et al., and U.S. patent 5,889,954 to Gessel et al., and further under 35 U.S.C. §102(b) as being anticipated by U.S.

patent 5,862,362 to Somasegar et al. and WO 97/35406 to Swetman. Applicant traverses the rejections.

As a general comment, Applicants note that the Office Action does not specifically indicate which portions of the cited references allegedly disclose the claimed features.

Chen et al. are concerned with simulating different network protocols using a scripting language. In particular, a stimulus/response engine is implemented on one or more routers under test (col. 3, lines 48-54). However, Chen et al. are not concerned with a simulator of client workstations as set forth in Applicants' claims. Claim 1, for example, involves generating data streams that emulate client requests from at least one application running at client workstations. The data streams are encapsulated according to at least one protocol stack by providing data streams with header data according to the at least one protocol stack. Also, a unique hardware address identifier is inserted into each of the encapsulated data streams to generate network data frames for delivery to a system under test, where each of the unique hardware address identifiers identifies an associated one of the client workstations. Chen et al. are not believed to disclose or suggest such as simulator.

Straathof et al. are concerned with load testing of a server. Straathof et al. capture a user's activities by providing a capture agent that captures Windows and SQL API calls (col. 4, lines 41-42; col. 4, line 66 to col. 5, line 1). However, since this approach depends upon the client system APIs, the simulation uses considerable resources of the client system and is limited to the capabilities of that client system. For example, if the client system does not support TCP/IP, then TCP/IP cannot be tested. In contrast, with Applicants' invention, the mechanisms required to effect the simulation, including the functions of the protocol stack, are contained in the simulator. For example, the TCP/IP protocol could be simulated even if the underlying machine did not have this protocol stack installed. Furthermore, rather than hooking into the process at the API level, the current invention hooks into the process at a level where unique hardware addresses identifiers are provided, e.g., level 2 in the OSI protocol stack. Thus, all of the overhead at higher levels of the protocol stack can be minimized.

Gessel et al. are concerned with testing a telecommunications networks by varying the configuration of the network dynamically and enforcing the required telecommunications

disciplines. In particular, a network manager establishes connections between nodes which communicate with compatible communications protocols, and denies requested connections between nodes which communicate with incompatible communications protocols (Abstract). Accordingly, Gessel et al. are not concerned with simulating client requests as set forth in Applicants' claims.

Somasegar et al. provide a network failure simulation tool that intercepts packets being sent or received, and redirecting the packets to substitute packet handlers. However, this technique is not believed to disclose or suggest simulating client requests as set forth in Applicants' claims.

Swetman is concerned with testing OSI layers 3 through 7, and thus is not concerned with simulating client requests having unique hardware identifiers, e.g., at level 2 of the protocol stack, as set forth in Applicants' claims. Level 1 and 2 communications protocols are replaced by a LAN protocol, which is in turn encapsulated by TCP/IP (page 7, lines 7-12). Accordingly, Swetman teaches away from claim 1.

Withdrawal of the rejections is therefore respectfully requested. Moreover, it is noted that Applicant's dependent claims recite further patentable features.

In view of the foregoing remarks, it is respectfully submitted that this application is in condition for allowance. Accordingly, it is respectfully requested that this application be allowed and a Notice of Allowance be issued. If the Examiner believes that a telephone conference with the Applicant's attorneys would be advantageous to the disposition of this case, the Examiner is requested to telephone the undersigned.

Respectfully submitted,


Ralph F. Hoppin
Registration No. 38,494

SCULLY, SCOTT, MURPHY & PRESSER
400 Garden City Plaza
Garden City, New York 11530
(516) 742-4343
RFH/rjl